1:Spier E-5 (1929-1932) 1933 NT15 River Yumans NT15
Maricopa

from these in that it was sometimes cultivated. This was a weed [241] 222 252 resembling tall Bermuda grass. The seeds were pounded in a mortar to remove the hulls, sprinkled with water, and ground on a metate. The meal was mixed into a dough with a little salt. It was baked in the ashes, which were later washed off, and eaten with mesquite bean soup and the like. The seeds of ʌgwa'vâ, probably pigweed, were also eaten.

While seeds appear to have been gathered in the late fall, i.e., December, berries were gathered in May and June. A bush about four feet tall, axtŏ'tâxa'n, bore little sweet red berries. The berries were washed and thrown into hot water to boil. They [272] cooked quickly. This was strained through a cloth, the berries mashed, and replaced in the liquor. This was used as a drink. Sometimes ground wheat (not mesquite) was cooked in this for a mush. If they wished to store the boiled berries, they were spread [251] on a cloth in the shade, and stored in pots when thoroughly dry. Similar berries, axtŏ'tâvi' (so called because they were bitter?), were prepared in exactly the same way. Mistletoe (kamu'c) grew plentifully on the mesquite bushes. Sprigs of this were gathered, the berries stripped off and boiled to furnish a juice which was sticky but tasteless. This was used as a liquor for wheat mush. Somewhat later than these, in June, the little blueblack berries of Crucifixion thorn (? uwe') were gathered. They were mashed in a basket to make a foamy liquid which was eaten without cooking. Sometimes the berries were dried and stored: when wanted they were soaked in hot water.

A sifter (caxaʀa'c) was used with the axtŏ't berries. This was [115] elliptical, like those of the Pima,[4] shallow, and about a foot long. Thin willow twigs were laid transversely and longitudinally, and bound to the willow hoop.

When a young girl had gathered axtŏ't and uwe' berries for the first time, it was customary for some older woman to mash and rub them on the girl's arms so she would be industrious.

The nuts of the abundant ironwood tree were ground and [171] leached after the fashion in which California Indians prepare acorns. By the end of the season, October, they are said to lie

[4] Russell, *Pima Indians*, p. 146.

1:Spier E-5 (1929-1932) 1933 NT15 River Yumans NT15
Maricopa

scraper hoe of the Mohave,[22] but used the same planting stick as a shovel, cultivating while standing. 412

Corn was almost always prepared on the metate before it was used. If green the kernels were mashed; when dry they were thoroughly ground. It was almost always eaten in the form of mush. Green corn was mashed, wrapped in the husks, and either boiled or placed on a spot previously heated by the fire, covered further with husks, then ashes and a little fire until baked into a loaf. Green corn was sometimes lye-hulled: half-boiled, ashes added, and stirred until the hull came free of the kernel. It was also cut from the ears, mashed on the metate and boiled with salt. The flavor of roasted corn was preferred to boiled. Kernels of roasted corn were plucked from the ear with the thumb nail and the handful poured into the mouth. 252

Corn for storage was dried on the house roof and placed in the basket granary either on the ear or shelled. Sometimes ears were roasted on a pile of brush or coals and also dried on the roof. Or the kernels were removed to dry on a cloth. Roasted ears were not ordinarily prepared for storage, but if so, they too went into the granary. Dry corn might be soaked in water and gently pounded in a mortar to remove the hulls. 251 [252]

Wafer bread, corresponding to that of the Pueblos and Havasupai, was made, but instead of a stone gridle, a lenticular pottery plate (maθi'l) was used. This was about a foot in diameter, and less than half an inch thick (Pl. VI, *i*). It was made very hot on the coals, when the thin corn batter could be rapidly spread over its concave side to form immediately as a wafer-thin cake called havaRi'k or maθi'lyam. Corn of any color was used. This hot plate was in constant use in earlier days, since tortillas of parched wheat or seeds were made on it, the dough being patted out into cakes about the size of the hand. 252 415 [171]

Wheat, which displaced corn, was treated in much the same fashion. The ears were fastened in bundles of an inch diameter, roasted on coals, and thrown on the roof to dry. These were stored in large pots, and when wanted the grain was beaten out. 251

[22] *Ibid.*, p. 736.

1:Spier E-5 (1929-1932) 1933 NT15 River Yumans NT15
Maricopa
Halchidhoma

also made for use in high water: these were two logs side by side with sticks tied across them. They used their hands for paddling and long punt poles. The Halchidhoma, like the Mohave, also ferried babies across the Colorado in large pots. These people were good swimmers; the Maricopa were not.

Fish were usually eaten fresh. The excess of a day's catch might be half broiled and hung to dry from the house beams. But no attempt was made to keep them longer than a week. Whether this was because such soft-fleshed fish cannot be successfully dried, or for want of knowledge or interest, I do not know.

Fish were either broiled or boiled with corn. In any event, they were always cooked by men, who served their wives before themselves. No reason was assigned for this, other than that it was so strongly customary as to be obligatory. Men never ate fish before their wives; when the wives had had enough they called their husbands.

Broiling was done by two methods. In one, the fish was always cut open along its right side near the backbone. If a man cut it on the opposite side, they made fun of him; told him to go back and grind his wheat (that is, that he was womanly, for he did not know how). The intestines cleaned away, the fish was spread open on the hot ground. Burning sticks were then propped over stones set around the fish so as to broil the upper side. All fish were treated in this fashion. They were broiled in this way very quickly. The other method consisted of cutting the fish along the belly, but not spreading the flanks. Again the coals were raked away, the fish laid side by side, and covered with ashes on which coals were heaped. It took all morning to cook them in this fashion.

They were boiled with salt. This took half a day. When done, finely ground corn, mixed with water to a thin gruel, was added to the pot of fish. The cook, always a man, stirred this, not round and round, but by inserting his stirrer down close to the sides of the vessel and lifting the fish. After the corn was added, another half hour was required to complete cooking. The stirrer used was a stick eighteen inches long, one and a half inches in

1:Spier E-5 (1929-1932) 1933 NT15 River Yumans NT15
Maricopa
Halchidhoma

252 diameter, and wedge-shaped at one end. It will be noted that
[415] scales, skin, bones and all went into the mess. In fact, the enormous number of small bones these fish contained gave them no concern at all.

262 Shellfish and crayfish were probably not eaten, if they occur in these waters at all. My informants knew of no mollusks nearby and professed ignorance of the Colorado.

MEALS AND DOMESTIC HABITS

512 Domestic duties began before sunrise. A woman rose and im-
462 mediately began her preparations for the morning meal, the cooking utensils being conveniently at hand near her head.
[513] (They slept with their heads to the east: these articles were kept near the doorway which was on the east side of the house.) She
[482] then went to fetch water sufficient for the day's supply, carrying a large pot on her head balanced on a cloth ring. Each family
[415] had several large vessels for storing water, mounted on branching posts erected under the shade. Fetching water was a feminine task alone: they always made a point of having the storage jars filled before the sun rose.

252 Cooking was done under the shade, with which each house was provided, in the summer, but in winter anywhere in the open. If need be they erected a little screen of arrowweed stalks thrust into the ground to keep off wind and dust. They only cooked inside the dwelling if forced to by bitter cold. There, as outdoors,
[372] the fire was not confined, as in a pit nor walled in. Cooking pots were supported on three stones. Today, a little trench is dug for the fire, the pot being supported on several iron rods or even
252 green sticks set across, but I was assured this was not aboriginal.
415 Clay cooking pots and bowls, ladles of clay and wood, mush stirrers, and baskets were the utensils. For a people primarily pottery using, they put an exaggerated value on the convenience of baskets (the shallow bowl baskets obtained from the Pima) and held it highly awkward to have to do without. Stone boiling was unknown. The mush stirrer was three or four arrowweeds twined together near one end (Pl. XIV, *d*).

1:Spier E-5 (1929-1932) 1933 NT15 River Yumans NT15
Maricopa

Mesquite branches were considered the best firewood; of these the supply was abundant. Men would go out to burn down and break up wood, but they would not carry it home; that was a woman's task. Nor would they fetch water, grind seeds, nor ordinarily cook. Men, however, would kindle the fire to warm the house in the evening. A fire to cook by was built of several large chunks of wood at the sides with sticks between. The common palm drill was used to light it.

The preparation of meals was laborious rather than complicated. With mesquite as the staple, a large part of a woman's daily routine had to be given over to pounding it in a mortar and grinding it on the metate. The metate was also requisitioned for corn in all its stages and many of the wild seeds. Ability to labor long and rapidly at it was reckoned the chief of a housewife's accomplishments; so much so that every prospective bride was set to work grinding by her mother-in-law to prove her proficiency. The wooden mortar came in for far less use. In it they broke up the mesquite beans preparatory to grinding on the metate, hulled various seeds and shelled corn. The principles of cooking were simple and few. Mesquite flour and tule pollen were preserved in cakes made by packing layer after layer into a hole. Other foods, vegetal and flesh, were half-broiled, roasted, or boiled to be dried for storage. In the final preparations for the meal, great use was made of baking in the ashes: seeds, stems, corn, and small grain were treated in this fashion.[23] For this the ground was heated, and the ashes with a few live coals raked back over the article. Boiling was, however, the mainstay in cooking, at least for vegetal products: mesquite, corn, seeds, pumpkins, squash, and beans regularly went into the pot. Mesquite gruel, and in later days wheat gruel (pinole), was commonly mixed with other foods: in fact, ground wild seeds were used for little more than to give variety to the flavor of the gruel. Pit roasting was rare, since mescal and cholla beans were obtained only infrequently. Parching with live coals in shallow bowls

[23] The Papago also roast rabbits in ashes (Lumholtz, *New Trails in Mexico*, p. 334).

1:Spier E-5 (1929-1932) 1933 NT15 River Yumans NT15
Maricopa

ally at a little distance to the southeast. This resembled the central frame of the dwelling, was of the same height but perhaps greater area, and invariably was framed on nine posts, set three in a row. The roof was covered with arrowweeds but not dirt. Sometimes willow branches were placed vertically on the west side against the sunshine, but all the sides were never enclosed. This structure furnished shade in summer: it never served as a dwelling. 343

Beneath the shade stood several mesquite posts supporting large jars for the storage of water. These stood about thirty inches high and, like those of the Pima and Papago,[7] had three short branches to hold the jar. The mouths of these jars were usually unprotected but sometimes covered by Pima baskets. [415] [312] [171]

Travelling parties never built houses of any description, perhaps because they were never far from home and even then within the enemy's striking distance. Further, families ordinarily left home to gather mesquite, etc., only in the summer when shade, rather than any other protection, was needed. They camped under the overhanging boughs of big trees. The White Mountain Apache custom of enclosing the camp in a ring of brush to keep out flying sand was unknown. 484 342

Each dwelling was also provided with a single storehouse (va'na'ʀa). There was no conventional place for its location: it stood in front, rear, or at the side of the house indifferently. In form it was simply a gable-roof set over a pit. This pit was oval, six to eight feet long, and almost knee deep. A post was set up in the pit near each end, a ridge pole connecting the pair. Willow branches were stuck into the ground around the brink of the pit so that they would lean against the ridge. (They were not tied to it.) Other willows were lashed horizontally to these to form two ribs around sides and end, one above the other. Arrowweeds were then placed over the frame as carefully as the thatch of the dwelling. There were three rows of thatch; the first, stem end up, all around at the base; another, also stem up, at a higher level; the third row, stem end down, lapped over the ridge. No outer ribs were needed to hold this thatch in place, since the house was 343

[7] Russell, *Pima Indians*, p. 127; Dorsey, *Indians of the Southwest*, p. 203.

1:Spier E-5 (1929-1932) 1933 NT15 River Yumans NT15
Maricopa

PLATE V

323
415

323
372

POTTER POLISHING VESSEL AND STACK PREPARED FOR FIRING POTTERY

[p. 102 A]

1:Spier E-5 (1929-1933) 1933 NT15 River Yumans NT15
Maricopa
Halchidhoma

CHAPTER V

MANUFACTURES

POTTERY

323 The Maricopa were essentially a pottery using people in the sense that the central Californians were basket users. To make the contrast even more explicit, we may compare them with a people in the same general area, the Havasupai, who, like themselves, used both pots and baskets. Where the Havasupai household had a dozen baskets standing about, where baskets were used for every domestic purpose, the Maricopa substituted pottery.

323 415 Every Maricopa household held innumerable pottery utensils: jars, bowls, parching pans, ladles, etc. Even today the common cooking pots in practically every house are of their own manufacture. Quantities of pottery are now made for the tourist [439] trade, which while differing somewhat in size, shape, decoration, and finish, are nevertheless made by the ancient technique. But despite the huge quantity they were accustomed to make, Maricopa pottery was, as a matter of fact, relatively a poor product.

323 [462] [868] Maricopa and Halchidhoma made pottery (kwĭlyăoma'ṭ) in exactly the same way. This was wholly a woman's occupation and a year-round task. They began at the art quite early: for instance, a five-year-old girl was seen following the mannerisms of her mother. She worked up a ball of mud, beat it flat on the bottom of an old pot with a paddle, and pinched up the sides to form a tiny vessel, which she set in the sun to dry.

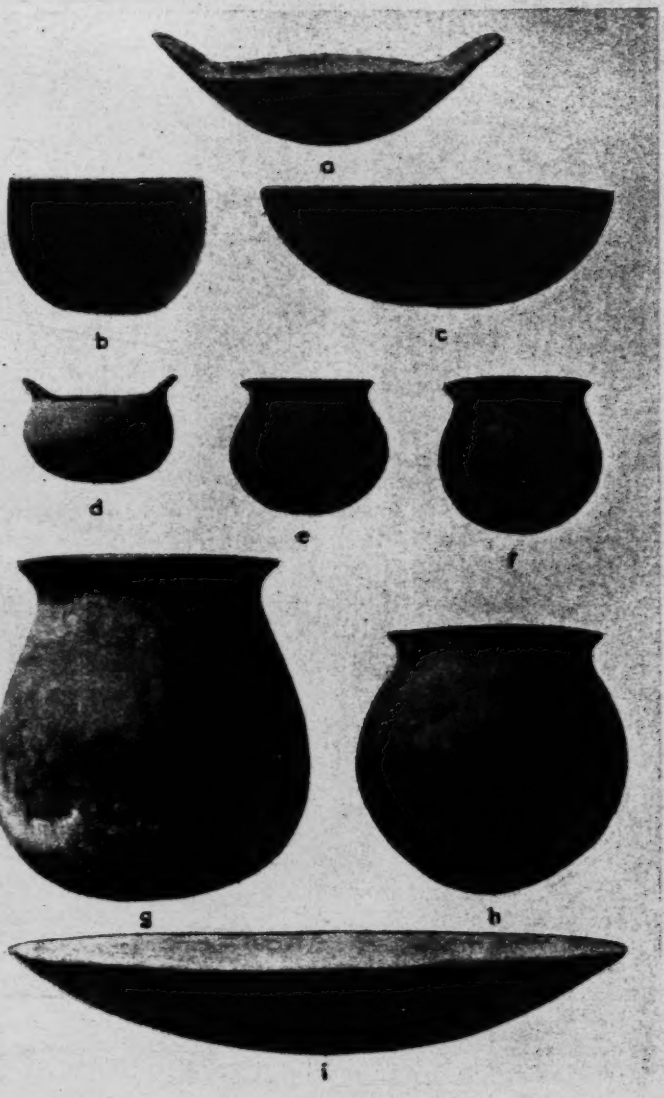
The forms were almost wholly wide-mouthed vessels and bowls (Pl. VI)[1]. This is generally true of hand-made pottery the world over except in such areas of pottery specialization as Peru, in

[1] Specimens shown in Pl. VI, Washington State Museum: *a*, 2–211883; *b*, 2–11893; *c*, 2–11889; *d*, 2–11896; *e*, 2–11879; *f*, 2–11891; *g*, 2–11898; *h*, 2–11897; *i*, 2–11884.

1:Spier E-5 (1929-1932) 1933 NT15 River Yumans NT15
Maricopa

PLATE VI

323
415



UNDECORATED POTTERY

(*a*, Parching pan; *b*, cup; *c*, bowl; *d–f*, *h*, cooking pots; *g*, storage jar; *i*, griddle)

[FACING p. 105]

1:Spier E-5 (1929-1932) 1933 NT15 River Yumans NT15
Maricopa

contrast to that spun on the wheel which is frequently narrow-necked. The only small-mouthed vessels here were the sahuaro syrup jars and those made to hold scalps. Multiple mouthed vessels, such as are said to be found on ancient Diegueño sites, did not occur. They also lacked loop handles, bosses, and legs. Pottery rattles were not made.

The largest vessels were those for carrying and storing water, called kwĭl,o". These were usually eighteen inches high, but sometimes as much as thirty inches (Pl. VI, *g*). A woman carried this full of water on her head, resting on a bark ring, and set it on a forked post in the shade. Since the vessels were porous, seepage and evaporation kept the water cool. Water jars were not covered. Old jars of this sort were used for the storage of food. Another type for water storage was cylindrical with a rounded base (two feet tall, eighteen inches in diameter), called kwĭl,o' ȧvulpo", "post water jar." It is doubtful that these were used for carrying water.

Cooking pots (tackĭ'n) resembled the water jars but were ordinarily smaller, usually about ten inches high (Pl. VI, *e*, *f*, *h*). Others (kaχét), of the same size as the tackĭ'n, differed in having the rim extended on either side in ears to serve as handles (Pl. VI, *d*).

Bowls and cups were alike called kwĭski'. The bowls were of various sizes, but all shallow and with rounded bottoms. The largest were about a foot in diameter, four inches deep (Pl. VI, *c*). Cups were three to five inches in diameter, with rounded bases, and with sides either cylindrical or flaring at the lip (Pl. VI, *b*). Another cup (kwĭskiχana'm, "cup drawn together") was drawn out at one side so that the mouth was oval, in shape resembling a gourd cut longitudinally.

Parching pans (kȧtĕ'l) were like large bowls with the rim drawn out into ears on opposite sides for handles (Pl. VI, *a*). The ears of these pans, like those of the cooking pots, were not horizontal, but followed the curvature of the sides of the vessel. Such pans were about a foot in diameter and four inches deep.

Small mouthed jars, given a special name, "suhuaro syrup container" (an,ȧχa'xilyȧpo'vȧ), had globular bodies, twelve

1:Spier E-5 (1929-1932) 1933 NT15 River Yumans NT15
Maricopa

inches in diameter, drawn into narrow necks with everted lips, two and a half inches in diameter. These had a total height of fifteen inches.

A special jar was made to hold scalps. This ('ie'rhĭl,ȧtca'vĭs, "hair container") was nearly globular, had no neck or lip, but a small mouth only large enough to thrust the hand through. (I was not told the size of the vessel.) A clay plate covered the mouth.

Ladles or spoons of various sizes were made (kamota'dako"; kamota', "spoon"). Most of them must have been ladle-like (Pl. VII, *a*). I was told, however, that spoons had bowls the size of our soup spoons, with handles curving backward at the tip. Larger ladles were also made of wood (Pl. XIV, *a*, *b*).

A griddle (mavi'l), on which to bake wafer bread, was made in the form of a thin, shallow bowl (about twelve inches in diameter; less than a half inch thick). This was considered difficult to manufacture because it broke easily while being fired (Pl. VI, *i*).

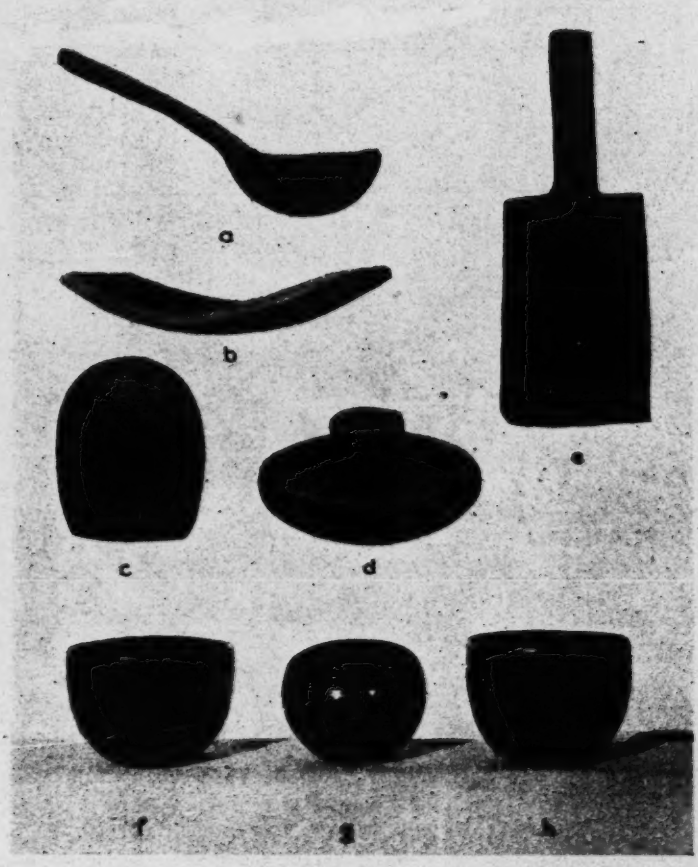
Decoration was not applied to cooking pots and parching pans since these were soon blackened in use. Water jars were painted red over the exterior, ladles in their entirety. Bowls or cups were solid red or white inside and out, with designs in black. Designs seem to have been applied relatively rarely in the old days. The combinations of red and white surface colors and the polished surfaces of modern examples did not exist.

The clay used for the body was common adobe (matgwĭnyatcau', "dirt for making things"), available anywhere within a few yards of the house. It was dug out with a stick, spread in the sun until well dried, and pounded fine on the metate. Fine sand was mixed with it; for every double-handful of adobe a like but scant quantity of sand was used. Sherds from the ancient ruins were also pounded up in place of sand tempering. Usually the mixed ingredients were then soaked with water, although the clay might be soaked before the sand was added. The batch was kneaded to the consistency of stiff bread-dough. The moulding of the vessel might start at once, but it was preferable to set the

1:Spier E-5 (1929-1932) 1933 NT15 River Yumans NT15
Maricopa

PLATE VII

323
413



323
415
531

POTTERY LADLE, POTTERS' TOOLS AND DECORATED POTTERY
(*a*, Ladle; *b*, *e*, paddles; *c*, *d*, anvils; *f*, *g*, *h*, Wash. State Mus. 2–11881, 11880, 11882)

[p.108 A]

1:Spier E-5 (1929-1932) 1933 NT15 River Yumans NT15
Maricopa

of the same shape, called kâsukĭ", were used in making large vessels. These were about ten inches long and were not so curved longitudinally. Another type of paddle had its rectangular blade and handle in the same plane, and was heavier than the foregoing types (Pl. VII, *e*).

The surface of the vessel was colored red or white, not as with some vessels today partly red and partly white. The red was a clay procured in the mountains by the Papago: it does not occur locally. This was ground on the metate, soaked in water, and either strained through a cloth, or the liquor decanted off after the

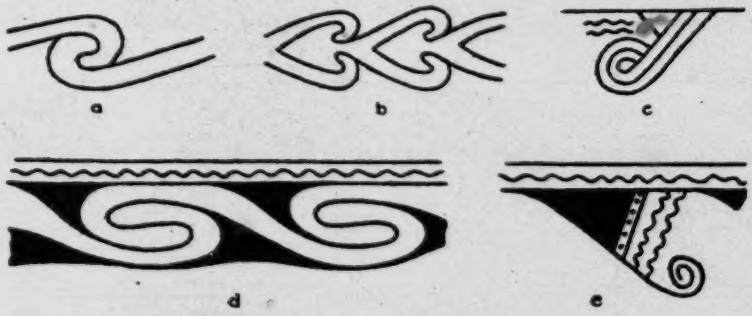


FIG. 7.—Designs on painted pottery (*a–c*, common designs from native sketches; *d*, *e*, from decorated vessels).

grains in suspension had settled. Only the liquor was saved. This was poured into a large porous pot so that the water would seep away. When the residue was sufficiently dry, it was formed into little rolls which were stored away. When wanted for use, these were broken up and soaked in water. The paint was smeared over the surface of the vessel with a cloth or the fingers. White paint was made from caliche (a calcareous sediment: impure sodium nitrate?) which occurs commonly in the neighborhood. It was prepared in exactly the same way. Modern pottery made for sale is polished briskly with a smooth pebble while the paint is still damp, but this was not an ancient trait.

The decoration of pottery was always by painting, never incising. The designs (hanyo'ʀăm, also writing) differed somewhat from those now in use. Figure 7, *a–c*, shows several of the old

192 vaχal,aδa'ʒ, "counting the intestines," loom-string (the string by which this was
286 later bound to the loom bar probably had no name)
xalyada'xk or caaž'kc, heald (the latter also the name of the weaving sword?)
n,Imakwe', shuttle
n,Imai'e'klc, "to draw together tightly," weaving sword
cak,i'nâ, weave dagger (also the modern name for a match)
atcω'tlʔtkwIn,I'pc, "cotton cover," cotton blanket
cuaδ'pa, woven belt
hapčʒ, woven headband
tcuxwI'l or xa'a'p, woven cradle band

BASKETRY

285 The Maricopa manufactured only burden baskets, obtaining
415 from the Pima the flat bowl-like baskets needed for winnowing or
439 serving food. Every household had one of each, but rarely more.

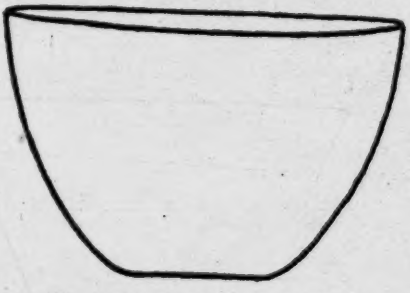


FIG. 11.—Burden basket (from native drawing)

Today a Pima basket forms part of every woman's equipment and is highly prized. The Maricopa were a pottery using people:
[171] where among the upland tribes of Arizona baskets were used for
[323] every purpose, here were clay vessels in a dozen forms. This is the lower Colorado habit, where also baskets were obtained by trade rather than manufactured, and not much used. My informant stated at one time that neither Maricopa nor Halchidhoma made baskets, but this is surely not correct even for the latter.

285 The burden basket was in coiled technique, wide-mouthed and about as tall as wide. The base was flat, the sides flaring (Fig. 11). Unfortunately I failed to record the size, but from the manner of reference, I judge the basket about sixteen inches tall. The foundation of the coil was a bundle of finely split tule; the sewing

1:Spier E-5 (1929-1932) 1933 NT15 River Yumans NT15
Maricopa

285 [177] [415] Recently a large storage basket (kwĭltŭ'n) for beans, corn, and wheat was imitated from the Pima. (In earlier days storage was in large pottery vessels.) Such baskets have rounded bases, with their sides tapering to a mouth but half the basal diameter. One specimen was thirty inches tall; its greatest diameter, near the base, the same; its mouth fourteen inches across. These were coiled on a foundation bundle of the longest wheat straws obtainable, the sewing element being strips of willow bark. The space between stitches was equal to the width of the sewing element. Since the foundation was about one half inch diameter and the bark strip nearly as broad, the result was a checkerboard pattern over the whole surface. Coiling of the base proceeded counterclockwise (looking into the basket), presumably on the near edge with the free end of the foundation to the right. When the side had been built up to a height of about a foot, the basket maker seated herself inside to work. This would bring the free end to her left. This basket was identical with those figured for the Pima by Russell and Kissell.[17]

[171] [415] Huge nest-like storage baskets or granaries (sȧkwi'n) were made, which were identical with those of the Pima in shape and technique of manufacture.[18] These were cylinders, three to five feet in diameter and somewhat less in height, without top or bottom, but set on a crib-work platform and covered with arrowweeds (see p. 90). The technique was a crude coiling, the material arrowweed. They were woven counterclockwise, working at the outer face on the near edge. Such granaries were constructed by both men and women.

[462]

[415] A sifter (caxara'c) was elliptical, shallow, and about a foot long. Thin willow twigs laid transversely and longitudinally were bound to a willow hoop.

[854] Basket technique was also used in the manufacture of cradle hoods.

[17] Russell, *Pima Indians*, p. 144; Kissell, *Basketry of the Papago and Pima*, pp. 184–85.

[18] Kissell, *op. cit.*, pp. 172 f., esp. p. 178. Bartlett mentioned only the type described in the preceding paragraph for both Pima and Maricopa, not this nest-like granary (*Personal Narrative*, II, 235).

1:Spier E-5 (1929-1932) 1933 NT15 River Yumans NT15
Maricopa

372 used. They did not make short travelling sets, like the Havasupai. The drill was called aun,ĭmĭk,ai′ or a′au′giă′m, "fire [192] shooter"; the hearth had no name; tinder was hanâv^{a}su′t.

A strike-a-light (augwĭnyata′vâ, "fire striker") was used when [484] travelling; striking flint against quartz. A rolled cotton cord was carried for tinder in a hollow cow horn. The use of the strike-a-[173] light and this tinder horn was said to be ancient but I am dubious. For one thing, I was told the horn was anciently that of a mountain sheep, but it is clear that they would not use the horn of this animal under any circumstances. The slow-match for carrying fire was unknown.[27]

412 Of *stone knives* (^{a}xâkwĭ′, n,ĭxakwĭ′, ^{a}viru′v^{a}, kwarâo′) all that is known is that these were made of dark obsidian (kwalacau′) found near the Salt River, where it was rare. This may have been flint rather than obsidian, because it was said also to have been used for striking fire. The informant knew nothing of their handles, nor if the blade was set in the side of the handle scalpel-wise.

Stone axes were not made, and those found in nearby ruins were used primarily to dress metates to shape.

Ladles were made of wood as well as clay. Wooden ladles may 415 always have been of mesquite which is sufficiently dense to carve nicely. Several seen had small circular bowls, conical below; another an elliptical bowl, rounded below; both having long straight handles in the plane of the bowl (Pl. XIV, *a*, *b*).[28] These were about a foot to sixteen inches in length. I am inclined to [114] agree with Russell that wooden ladles, at least those with conical [177] bowls, were a recent acquisition. He states that they were derived from the Mexicans through the Papago.[29] The ladle with the conical bowl is certainly like old European forms. Wood-[322] working was little developed: wooden bowls were not made.

[27] But Garcés' Halchidhoma travelling companion in June 1774 "carried a firebrand in one hand all the way [Ehrenberg to Agua Caliente], and it did not go out" (Bolton, *Anza's California Expeditions*, II, 387). Since it was summer, this must have been for the purpose of starting camp fires, not the torch carried for warmth by other lower Colorado Yumans.

[28] Washington State Museum, Nos. 2–11872 (or 73) and 2–11871, respectively.

[29] *Pima Indians*, p. 101.

1:Spier E-5 (1929-1932) 1933 NT15 River Yumans NT15
Maricopa

The *mush stirrer* (cu.ŭ'n) was simply three or four arrowweeds, dressed and held by loose twining at the handle end. Their lower ends were then trimmed off even (Pl. XIV, *d*).[30] 415

A *broom* (n,imama'l) was simply a large bundle of arrowweeds bound at one end. [412]

Temporary cups and bowls were sometimes fashioned by hollowing out small barrel cacti when travelling.

The *rabbit net* (ca'a'k) was a purse net set in the runway. It was about a yard square. A stout cord threaded through all four edges was attached to a stake. The rabbit dashing into the net, spread open on the bushes, pursed it and was held fast by the stake. The cordage for the net was rolled of the strings of black-eyed pea pods. The net was made on a loop foundation (at upper left corner, Pl. XI). Twenty-five or thirty meshes formed the first row: these tied together (?) were called an ear (smalk). No net gauge was used. 224 286 [283]

Flageolet.—This instrument was used in lovemaking, but not as an accompaniment to song. "A boy was certain to get a girl if he used it." It was a large reed, up to two feet in length, so chosen that it was formed of two internodal sections with a single node or septum between, both ends then being open. Small holes were made on each side of the node so that it could be pierced, perhaps slotted between these holes. In addition, four finger holes were made near the distal end of the flageolet. To play it, one blew into the open proximal end which was held between the lips; the forefinger of the left hand partially covered the holes at the node to serve as a reed, while the fingers of the other hand lay on the holes near the distal end. The instrument was called w'ilw'i'l or less properly taltal. 534 [832]

WEAPONS

Armament for the Maricopa consisted of bows, short wooden clubs, and small circular shields. A special pike was carried by the battle leader alone; rarely other men armed themselves with simple wooden pikes. Armor, pole-length clubs, and stone headed clubs, all used in this area, were unknown. The Maricopa 411

[30] No. 2-11874.

1:Spier E-5 (1929-1932) 1933 NT15 River Yumans NT15
Maricopa

PLATE XIV

• 415

[292]

TOOLS AND SANDALS

(*a*, *b*, Wooden ladles; *c*, travelling mortar; *d*, mush stirrer; *e*, sandals)

[FACING p. 138]

1:Spier E-5 (1929-1932) 1933 NT15 River Yumans NT15
Maricopa
Halchidhoma
Kohuana

Singing alone comprised the night performance within the meeting house, where the scalp had been set on a short post just within the doorway. (The Maricopa never danced in this house.) The old women joined the men in singing on this occasion, although normally they never attended formal gatherings in the meeting house. The singers used rattles or beat and scraped on overturned baskets by way of accompaniment as the songs dictated. The singing continued throughout the night.

There seem to have been no songs peculiar to the scalp dance with the possible exception of hwĭcĭvau', "enemy standing," and tuχa'ʀᴬ, "pasted, sealed." The former bore a name identical with that of the whole performance; the latter was said never to have been sung for mere amusement. But these songs, like pipa' (people), kapĕ'ṭ (turtle), and cĭmâʊul,ᴬ (red ants) were sung at both preparatory and victory dances. Hwĭcĭvau' was said to be Halchidhoma, kapĕ'ṭ Kohuana, and the three others Maricopa. All were sung at the joint performances of the mixed community. Tuχa'ʀᴬ and hwĭcĭvau' had rattle accompaniments. The singer of the last-named dreamed of the enemy teaching him the song. The song related how the enemy treated prisoners and how appalling the enemy thought it that one of them lost his scalp. It also told of insects fighting among themselves.

The scalp now went into the permanent keeping of its elderly custodian, who placed it with others collected in the past in a special receptacle in the meeting house. Each morning before dawn for four days he bathed, washed the scalp, and replaced it. The receptacle (called 'ie'rhĭl,ătca'vĭs, "hair container") was especially made for the purpose: a large undecorated pot, nearly globular, with a small mouth and no neck, covered with a clay plate. For these four days he slept alone in the meeting house, lying on the south side with the pot to the east near his head. No one else dared sleep there for fear of the scalps. The keeper would hear the scalps talking together in the pot; would hear them go outside to play, open the door, and re-enter the pot. He would sometimes announce, "Something is going to happen to our people, because I heard the scalps laughing and having a good time"; laughing because a Maricopa was going to be killed or die at home.

2:Bartlett G-5 (1850-1853) 1854
NT15 River Yumans NT15
Pima N429

and bodies in the task. I have seen women thus employed when the thermometer stood at 110°, while their lords lay stretched out at length on their backs looking on.

Water is invariably brought by the women in large earthen vessels upon their heads resting upon a small cushion. Some of these vessels hold six gallons. This mode of carrying burdens, by which the body is kept in a perfectly erect position, tends greatly to develope the chest and add to the general beauty of the figure. Hence we see among the Indians, as well as among the lower class of Mexicans, forms which Walker might well have taken for models in his "Analysis of Beauty in Women."

As the manners and customs of the Pimos and Coco-Maricopas are the same, with the exception of their rites of burial, I shall include both in describing these customs; although there is little doubt but that the knowledge of the arts which they possess originated with the Pimos. Cotton is raised by them,* which they spin and weave. Their only manufactures consist of blankets of various textures and sizes; a heavy cloth of the same material used by the women to put around their loins; and an article from three to four inches wide, used as a band for the head, or a girdle for the waist. The blankets are woven with large threads, slightly twisted and without any nap. They are made of white cotton, and are without ornament of colors or figures, save a narrow selvage of buff.

* I brought home with me the seeds with samples of this cotton, which was pronounced equal to the best Sea Island. The seeds I distributed among various planters.

2:Bartlett G-5 (1850-1853) 1854
NT15 River Yumans NT15
Pima N429

RY P 286 stretched upon the ground by means of stakes. Each alternate thread of the warp is passed round a piece of cane, which, being lifted, opens a passage for the shuttle in the manner of a sley. The operator sits in the fashion of a tailor, and, raising the sley with one hand, with the other passes the shuttle, which is simply a pointed stick with the thread wound upon it, between the threads of the warp. The work is beaten up after the passage of each thread by the use of a sharp smooth-edged instrument made of hard wood. The operation of course progresses slowly; and from the length of RY P time consumed in spinning and weaving, they set a high price upon their blankets, asking for them ten or [887] [435] twelve dollars in money, or a new woollen blanket of equal size. The weaving is generally done by the old men.

P RY 286 291 The head-band or girdle consists of a white ground with a variety of figures of red, blue, and buff. The figures are angular, and, though they present a great variety, are all of one general character. The colored portions of these belts are made of wool, and the colors are quite brilliant. On examining the patterns on these bands, one is struck with their general resemblance to the figures on the ancient pottery found among the ruins of this country, a comparison with which will be made hereafter.

● RY P 323 ● 415 The pottery made by these tribes is all red or dark brown, the latter a blending of black and red. The articles made are very limited, though, perhaps, quite sufficient for their wants. In fact, they are the same as those made and in use by the Mexicans. They consist of ollas, or vases, of every size, the largest holding

2:Bartlett G-5 (1850-1853) 1854
NT15 River Yumans NT15
Pima N429

about two pailfulls, and the smallest half a pint; jars with small apertures, resembling bottles; basins of different sizes and forms, from that of a milk-pan to a saucer; and oblong vessels of small dimensions used as dippers. All these vessels are painted or ornamented with black lines arranged in geometrical figures, and of a character resembling those on the head-bands.

Baskets and Pottery of the Pimos and Coco-Maricopas.

The basket work of this people is remarkably well made of willow twigs, and so close as to be impervious to water. The baskets are of various shapes, and are used for different purposes. Those of a large basin-like form are the most common. These they carry on their heads filled with corn or other articles. Like

2:Bartlett G-5 (1850-1853) 1854
NT15 River Yumans NT15
Pima N429

P RY 343

air through the grain deposited in them. They are wattled with straw and rushes, and are sometimes coated with a thick layer of mud. As this becomes dry, additional layers of mud are added, which render

P RY [361 231]

Coco-Maricopa Village.

P RY [415]

them impervious to water. The wheat and shelled corn (maize) are put into large vases or baskets, from three to five feet high, made out of ropes of wheaten straw. These ropes, which are as thick as one's arm, are coiled around into graceful forms, and sewed together like some kinds of basket work. The vases

/81/

The Maricopa

Customs, Arts, and Beliefs

101 131 The Maricopa are a small tribe of Yuman stock living as neighbors of the Pima, chiefly in the valley of the Gila in southern Arizona, though a few make their home on the Salt River reservation east of Phoenix. Maricopa, Yuma, and Mohave tra- 101 dition, while vague on the subject, relates that the Maricopa 173 once lived on the Colorado river between the Mohave and the Yuma. Possibly they were a part of the latter, rather than a separate tribe. Enemies of both the Yuma and the Mohave, they were gradually forced from their home country to the Gila and up that stream. Their removal from the Colorado to their pres- [167] ent home was not accomplished at one time, but represented a [648] series of movements up the Gila, until eventually an alliance was made with their old-time enemies, the Pima -- an alliance of great benefit to both tribes, for it enabled them more successfully to resist the marauding Apache. The Maricopa separation was much more recent than that of the Havasupai and Walapai [144] from the parent body, for the Maricopa still bear close physical resemblance to their Yuma and Mohave kindred. Furthermore, the mythology of the Maricopa also indicates comparatively recent association with these two tribes. When noted by Father Garcés, in 1775, they had not progressed farther eastward than Gila Bend.

177 The mythological, ceremonial, and religious concepts of the Maricopa, although primarily Yuman, show some effect of their close contact with the Pima. In mode of living they are much like their neighbors, and show few traces of their Yuman ancestry. /82/ Morally, too, they differ widely from the Yuma, being exceedingly strict, while the latter are notoriously lax. The [285] Pima type of dwelling was adopted by them, and their knowledge of basketry evidently came from the same source, for this art, although exhibiting somewhat greater skill in execution, shows identity in form, design, and material with that of the Pima.

323 They make a great deal of pottery: large jars for storing water ● 415 in the houses, smaller ones for carrying water on the head, and [482] cooking pots of many sizes.